

The Shortest Distance From a Point to a Line

Date: _____

EX: Find the distance from the point $P(-3, 0)$ to the line $x - y = -10$.

Step A: Draw a diagram.

* The shortest distance is always the perpendicular distance*

Step B: Find the equation of the line of the “perpendicular distance”.

Step C: Find the point where the two lines meet by doing substitution or elimination.

Step D: Using the length of a line segment formula, find the distance between the point given in the question and the point found in step C.

